

Title (en)

INTEGRAL STRUCTURES OF METAL AND PLASTIC

Title (de)

INTEGRALE STRUKTUR AUS METALL UND KUNSTSTOFF

Title (fr)

STRUCTURES METALLIQUES ET PLASTIQUES MONOBLOCS

Publication

**EP 1373054 B1 20080521 (EN)**

Application

**EP 02723302 A 20020228**

Priority

- US 0206396 W 20020228
- US 27193901 P 20010228

Abstract (en)

[origin: WO02068258A1] Integral structures (10, 20, 30) are formed using a combination of both metal and plastic. These materials are secured together by the unique design of the metal in areas of contact with the plastic. Ribbed structures (4) in which metal is suitably joined with injection molded plastic are also contemplated herein.

IPC 8 full level

**B62D 25/08** (2006.01); **B62D 29/00** (2006.01); **B29C 45/14** (2006.01); **B29L 9/00** (2006.01)

CPC (source: EP US)

**B29C 45/14311** (2013.01 - EP US); **B62D 29/001** (2013.01 - EP US); **B62D 29/004** (2013.01 - EP US); **B29L 2031/3002** (2013.01 - EP US); **Y10T 428/31681** (2015.04 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**WO 02068258 A1 20020906**; AT E396102 T1 20080615; CA 2437553 A1 20020906; DE 60226711 D1 20080703; EP 1373054 A1 20040102; EP 1373054 B1 20080521; JP 2004526594 A 20040902; US 2002157775 A1 20021031; US 6908132 B2 20050621

DOCDB simple family (application)

**US 0206396 W 20020228**; AT 02723302 T 20020228; CA 2437553 A 20020228; DE 60226711 T 20020228; EP 02723302 A 20020228; JP 2002567591 A 20020228; US 8580302 A 20020227